- (4.) libellula 10045 v. nov. (two specimens.)
- (5.) libellula 12xx345 v. nov.
- (6.) libellula 12X345 v. nov. (juv.)
- (7.) *libellula* <sub>1</sub>23<sub>3</sub>45 v. nov.
- (8.) libellula 10300 v. nov., but also British. (juv.)
- (9.) libellula (123)(45) = gronovia Moq. In Europe, this variety is found in France, England, and Wales, and the Rev. A. Dean recently sent me examples of it from the Tyrol, and from the Pyrenees..
- (10.)  $libellula\ 1(23)(45) = brardia\ Moq.$  (juv.)
- (11.) libellula 1(23<sub>3</sub>)<sub>x</sub>(45) v. nov. (jnv.)
- (12.) libellula 1<sub>2</sub>3<sub>3</sub>45 v. nov. (juv.)
- (13.) libellula  $000_{xx}00$  v. nov.
- (14.) libellula 12<sub>3x4</sub>45 v. nov. (juv.)
- (15.) hbellula 12x3(45) v. nov. (juv.)
- (16.) libellula (12)345 Moq. (juv.)
- (17.) libellula (12)X3(45) v. nov.
- (18.) libellula 120xx45 v. nov.
- (19.) libellula  $1_{2x}3(X4)5_5$  v. nov. (juv.)
- (20.) libellula 12(34)5 Kregl. (juv.)
- (21.) libellula 02345 = Schrateria Moq.
- (22.) libellula  $1030_x(5)$  v. nov. (juv.)
- (23.) petiveria 12<sub>3</sub>45 Ckll.
- (24.) petiveria 1<sub>2</sub>545 Roebuck.
- (25.) petiveria 12345 Fenn.
- (26.) petiveria 12045 = Michaudia Loc.
- (27.) petiveria 123445 Borcherding, = var. sexfasciata Moq.

This remarkably variable series only emphasises the peculiarities of the previous one. There is very little variation in the ground-color of the shells.

West Cliff, Colo., Sept. 29, 1889.

## COLLECTING LAND SHELLS IN SOUTHERN CALIFORNIA.

## BY EDWARD W. ROPER.

"Look where you step" is a good rule to follow in any country, but it is absolutely essential in San Diego county, for two reasons. First, because it is very important, if there is a rattlesnake in your path, to see him before treading upon him. Secondly, because if you carelessly step on the little round cactus so common in this region, the spines, if they do not puncture the sole of your shoe, will penetrate the upper leather more surely than needles. In the eyes of an eastern collector, accustomed to look for land shells in moist, shady places, it is not a promising country. There are no woods, except on the mountains, and few streams of water around whose banks mollusks might be expected. Yet there are shells all around.

Find a cactus that is dead, and turn over its fallen leaves with a stout stick. Like the watermelon, a cactus seems to carry its own water, and under this moist, decaying mass the little Pupas may be found, and Helix Stearnsiana Gabb takes shelter from the sun. The night dews are heavy, and doubtless when darkness falls, the snails emerge from their hiding places, and browse around for food.

Another favorite collecting ground is a pile of loose rocks; if on the south side of a hill, where the sun beats hottest, so much the better. Turn over every stone until the damp earth is reached, and your eyes will be gladdened by the sight of the elegant dark brown shiny Glyptostoma Newberryana W. G. B. If the rocks are in the midst of shrubbery and herbage, the large beautifully banded Arianta tudiculata Binn. is likely to be found. Very rarely do any of these shells live on the shaded northern slopes, doubtless because where the ground is less heated during the day, less moisture is condensed at night. In this country, then, the collector truly earns his prizes by the sweat of his brow.

One other land shell is the Succinea Oregonensis Lea, of a reddish golden hue, found on the weedy river banks, and living only a little less in the water than its frequent companions Limnæa Adelinæ Tryon, and Physa Gabbii Tryon. These are the common shells of the open country, although far from numerous in individuals, when one considers the hours of diligent labor necessary to procure a reasonable number.

## WHAT IS A SPECIES?

## BY CHARLES T. SIMPSON.

In view of the practice of naming everything now-a-days by the so-called new school of conchologists, we may well ask the above question. Agassiz in classifiying animal life says, that "species are